

August 22, 2006

## Group says mines need to clean act on mercury

Environmentalists, industry see recent data in different light

By Judy Fahys -- The Salt Lake Tribune

Idaho environmentalists say new data show Nevada mines have chronically underreported their output of mercury that is believed to float into nearby states.

It continues to be a significant public health threat," said Justin Hayes, of the Idaho Conservation League.

Utahns and their Idaho neighbors worry that unregulated mercury from the Nevada mines has wound up in the air and eventually in water and wildlife. Now, nine Idaho water bodies have fish consumption advisories, and Utah has three for fish and a blanket warning against eating two species of Great Salt Lake ducks because of mercury. Some of the highest environmental mercury levels ever detected have been found in recent years in Great Salt Lake.

The Idaho group made a public information request to the Nevada Department of Environmental Protection a few months after the regulators adopted new, mandatory mercury monitoring at the mines. Voluntary reductions by four mines have cut emissions from 15,000 pounds in 2002 to about 4,000 in 2004.

But Hayes pointed to data recently submitted to Nevada regulators by Newmont Mining Co. that showed the company's Gold Quarry mine reported releasing

### How mercury from mines becomes airborne



**Gold is microscopic** in size and trapped in ore-bearing rock. It must be blasted from open pits and underground mines. Twenty to 100 tons of rock must be crushed fine as talc in order to yield a single ounce of gold.



**Ore is processed** with cyanide and heat. Adding cyanide to the ore releases mercury. Additional mercury is released when the ore is heated to speed up the extraction process.



**Because mercury** vaporizes at a lower temperature than gold, it essentially boils off. Much of that mercury is collected as byproduct and sold. But some of the mercury escapes into the air.

*Source: Tribune research*



**An EPA report** that relies on 1998 emissions data extrapolated back to 1985 estimates the Nevada mines released between 70 and 200 tons of mercury into the atmosphere.

*STAFF GRAPHIC / The Salt Lake Tribune*

200 pounds of mercury in 2004 but that had grown to 650 pounds last year. At its Twin Creek mine, Newmont reported 300 pounds of mercury releases in 2004 but 600 pounds in 2005.

"That is a result of finally accurate monitoring," said Hayes. Past emissions were projected by computer, based on measures taken years ago.

Newmont Mining did not respond to a call seeking comment. Mercury is naturally occurring, but it takes on toxic qualities under certain natural conditions in the environment. This poisonous methylmercury builds up in the food chain.

When too much is ingested, it can cause neurological problems, including learning disabilities. Children and the unborn are generally thought to be the most vulnerable, so warnings typically focus on women of child-bearing age and children.

In Utah, environmental officials have taken a wait-and-see approach to the gold-mine mercury, saying a better understanding is needed of how mercury gets here. The Utah Department of Water Quality formed a task force on the issue that involves government agencies, environmental groups, trade groups and others.

Dante Pistone, spokesman for the Nevada Environment Department, declined to comment on the conservation group's conclusions. He noted that the group already has put his agency on notice that it intends to file suit about mercury controls.

"Our policy is not to comment on matters in which litigation is pending," he said in an e-mail. "Although the lawsuit has not been filed yet, we don't want to say anything that might be used by either side."

Barrick Gold said it had good news to report from at least one of its mines. The Goldstrike mine, the nation's largest, saw mercury decline from 2,174 pounds in 2004 to 1,678 pounds last year, reported Rich Haddock, Barrick's environmental vice president.

Mercury releases for this year are expected to be less than 1,000 pounds, he said. Meanwhile, the company's newly acquired Cortez mine reported to the state 487 pounds of mercury emissions in 2004 and 849 pounds last year. Haddock said emissions should be around 300 pounds this year.

This article was posted online at: [http://www.sltrib.com/utah/ci\\_4217693](http://www.sltrib.com/utah/ci_4217693)